

Title (en)

METHOD OF AND APPARATUS FOR MEASURING VERY LOW WATER CONTENT IN GAS

Publication

EP 0294906 A3 19900516 (EN)

Application

EP 88201190 A 19880609

Priority

JP 14576487 A 19870611

Abstract (en)

[origin: EP0294906A2] A method is disclosed for measuring the amount of water in a gas with a very low water content which comprises using a dew-point meter or a frost-point meter comprising: a reflecting mirror whose temperature is variable in the range of from room temperature to the temperature of liquid nitrogen; a gas ejecting nozzle disposed so as to face said reflecting mirror; means for projecting either a condensed light ray or a laser beam onto that portion at which dew and/or frost is formed; and means for detecting a sudden increase in the intensity of scattered light, the process comprising: a step of cooling a gas to be measured so that its temperature becomes close to that of the mirror; a step of ejecting the gas from the said nozzle so as to hit said reflecting mirror; a step of projecting either a condensed light ray or a laser beam onto that portion of the mirror surface against which the gas to be measured is blown; and a step of detecting a sudden increase in the intensity of scattered light, thereby measuring a low dew point in the range of from -80 DEG C to the temperature of liquid nitrogen.

IPC 1-7

G01N 25/68; **G01N 21/55**

IPC 8 full level

G01N 21/47 (2006.01); **G01N 25/68** (2006.01)

CPC (source: EP US)

G01N 25/68 (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)

BE CH DE FR GB IT LI NL

DOCDB simple family (publication)

EP 0294906 A2 19881214; **EP 0294906 A3 19900516**; **EP 0294906 B1 19930428**; CA 1322867 C 19931012; DE 3819890 A1 19890112; DE 3880558 D1 19930603; DE 3880558 T2 19930812; GB 2206697 A 19890111; GB 2206697 B 19911218; GB 8813806 D0 19880713; JP H07104304 B2 19951113; JP S63309846 A 19881216; US 5052818 A 19911001

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EP 88201190 A 19880609; CA 569063 A 19880609; DE 3819890 A 19880610; DE 3880558 T 19880609; GB 8813806 A 19880610; JP 14576487 A 19870611; US 35342989 A 19890518